INVITATION TO BID	BID DUE DATE AND TIME
BOARD OF SUPERVISORS OF	J 10/26/2005 11:00 am CT
LOUISIANA STATE UNIVERSITY AND AGRICULTURAL & MECHANICAL COLLEGE	10/26/2005 11:00 am ст
SOLICITATION B6AET0064	RETURN BID TO
VENDOR #	
VENDOR NAME AND ADDRESS	Louisiana State University
	Purchasing Office 213 Thomas Boyd Hall
	Baton Rouge, LA 70803
	BUYER Ashley E. Terrio, CPPB BUYER PHONE 225-578-2097
	ISSUE DATE 10/05/2005
TITLE: SAMPLERS, PORTABLE & ACCESSORIES	
To Be Comple	ted By Bidder
1. "No Bid" (sign and return this page only).	·
2. My Company does not wish to receive future solicita 3. Specify your Delivery: To be made within	
4. Specify your Payment Terms:	•
Prompt payment cash discounts for less than 30 days and less determining awards. On indefinite quantity term contracts, ca	s than 1% will be accepted, but will not be considered in
considered in determining awards.	sh discounts will be accepted and taken, but will not be
5. Specify your Bid Reference Number: (This number will appear on any resulting order or contract.)	
General Instruc	
1. Sealed bids for furnishing the items and/or services specified Campus/Department at the "Return Bid To" address stated ab	
2. Bids must be signed by a person authorized to bind the vendo	or. In accordance with Louisiana R.S. 39:1594, the person
signing the bid must be: (1) a current corporate officer, partner submit a bid as evidenced in the appropriate records filed with	
authorized to bind the vendor as evidenced by a corporate res	solution, certificate or affidavit; or (3) other documents indicating
authority which are acceptable to the public entity.3. Read the entire solicitation, including all terms, conditions an	d specifications.
4. All bid information and prices must be typed or written in inl	c. Any corrections, erasures or other forms of alteration to unit
prices are to be initialed by the bidder. 5. Bid prices shall include all delivery charges paid by the vendon.	or, F.O.B. L.S.U. Destination, unless otherwise provided in the
solicitation. Any invoiced delivery charges not quoted and ite	
non-payment. 6. Payment is to be made within 30 days after receipt of properl	v executed invoice or delivery and acceptance, whichever is
later. Delinquent payment penalties are governed by L.R.S. 3	9:1695.
7. By signing this solicitation, the bidder certifies compliance w specifications; and further certifies that this bid is made with	
BIDDER (Name of Firm)	MAILING ADDRESS
AUTHORIZED SIGNATURE	CITY, STATE ZIP
PRINTED NAME	PHONE #
TITLE	FAV 4
TITLE	FAX#
E-MAIL	FEDERAL TAX ID #

STANDARD TERMS & CONDITIONS

INVITATION TO BID

PAGE 2 of 13

SOLICITATION B6AET0064

DUE DATE 10/26/2005

DUE TIME 11:00 am

These standard terms and conditions shall apply to all LSU solicitations, unless otherwise specifically amended and provided for in the special terms and conditions, specifications, or other solicitation documents. In the event of conflict between the General Instructions to Bidders or Standard Terms & Conditions and the Special Terms & Conditions, the Special Terms & Conditions shall govern.

Bids submitted are subject to provisions of the laws of the State of Louisiana, including but not limited to: the Louisiana Procurement Code (R.S. 39:1551-1736); Purchasing Rules and Regulations (Title 34 of the Louisiana Administrative Code); Executive Orders; and the terms, conditions, and specifications stated in this solicitation.

1. Bid Delivery and Receipt

To be considered, sealed bids must be received and time-stamped at the "Return Bid To" address no later than the due date and time specified herein. Sealed bids cannot be accepted by telegraph, fax, or e-mail. Price alterations and addenda to bids may be submitted by telegraph or fax, and will be considered provided bidder's sealed bid, price alterations and addenda have been received in the purchasing office prior to bid opening time. Late bids cannot be accepted per L.A.C. 34.I.517, and shall be returned unopened.

2. Bid Forms

Bids are to be submitted on and in accordance with the LSU solicitation forms provided, and must be signed by an authorized agent of the vendor. Bids submitted on other forms or in other price formats may be considered informal and may be rejected in part or in its entirety. Bids submitted in pencil and/or bids containing no original signature indicating the bidder's intent to be bound will not be accepted.

3. Interpretation of Solicitation/Bidder Inquiries

If bidder is in doubt as to the meaning of any part or requirement of this solicitation, bidder may submit a written request for interpretation to the Buyer-of-Record at the address and/or fax number shown above. Written inquiries must be received in the LSU Purchasing Office no later than five (5) calendar days prior to the opening of bids, and shall be clearly cross-referenced to the relevant solicitation/specification in question.

No decisions or actions shall be executed by any bidder as a result of oral discussions with any LSU employee or consultant. Any interpretation of the documents will be made by formal addendum only, issued by the LSU Purchasing Office, and mailed or delivered to all bidders known to have received the solicitation. LSU shall not be responsible for any other interpretations or assumptions made by bidder.

4. Bid Opening

Bidders may attend the public bid opening of sealed bids and proposals. No information or opinions concerning the ultimate contract award will be given at bid opening or during the evaluation process. Written bid tabulations will not be furnished. Bids may be examined within 72 hours after bid opening. Information pertaining to completed files may be secured by visiting the LSU Purchasing Office during normal working hours.

5. Special Accommodations

Any "qualified individual with a disability" as defined by the Americans with Disabilities Act, who has submitted a bid and desires to attend the public bid opening, must notify the LSU Purchasing Office in writing not later than seven days prior to the bid opening date of their need for special accommodations. If the request cannot be reasonably provided, the individual will be informed prior to the bid opening.

6. Standards of Quality

Any product or service bid shall conform to all applicable federal, state and local laws and regulations, and the specifications contained in the solicitation. Any manufacturer's name, trade name, brand name, or catalog number used in the specification is for the purpose of describing the standard of quality, performance, and characteristics desired; and is not intended to limit or restrict competition. Bidder must specify the brand and model number of the product offered in his bid. Bids not specifying brand and model number shall be considered as offering the exact product specified in the solicitation.

7. New Products/Warranty/Patents

All products bid for purchase must be new, never previously used, of the manufacturer's current model and/or packaging, and of best quality as measured by acceptable trade standards. No remanufactured, demonstrator, used or irregular products will be considered for purchase unless otherwise specified.

The manufacturer's standard published warranty and provisions shall apply, unless more stringent warranties are otherwise required by LSU and specified in the solicitation. In such cases, the bidder and/or manufacturer shall honor the specified warranty requirements, and bid prices shall include any premium costs of such coverage.

Bidder guarantees that the products proposed and furnished will not infringe upon any valid patent or trademark; and shall, at its own expense, defend any and all actions or suits charging such infringement, and shall save LSU harmless.

8. Descriptive Information

Bidders proposing an equivalent brand or model are to submit with the bid descriptive information (such as literature, technical data, illustrations, etc) sufficient for LSU to evaluate quality, suitability, and compliance with the specifications. Failure to

STANDARD TERMS & CONDITIONS

INVITATION TO BID

PAGE 3 of 13

SOLICITATION B6AET0064

DUE DATE 10/26/2005

DUE TIME 11:00 am

submit descriptive information may cause bid to be rejected. Any changes made by bidder to a manufacturer's published specifications shall be verifiable by the manufacturer. If items bid do not fully comply with specifications, bidder must state in what respect items deviate. Bidder's failure to note exceptions in its bid will not relieve the bidder from supplying the actual products requested.

9. Bids/Prices/F.O.B. Point

- The bid price for each item is to be quoted on a "net" basis and F.O.B. LSU Destination, i.e. title passing upon receipt and inclusive of all delivery charges, any item discounts, etc.
- Bids other than F.O.B. LSU Destination may be rejected.
- Bids indicating estimated freight charges may be rejected.
- Bids requiring deposits, payment in advance, or C.O.D. terms may be rejected.
- Bidders who do not quote "net" item prices and who separately quote an overall "lump sum" freight cost or discount for all items shall be considered as submitting an "all-or-none" bid for evaluation and award purposes; and risk rejection if award is made on an item basis.
- Prices shall be firm for acceptance for a minimum of 30 days, unless otherwise specified. Bids conditioned with shorter acceptance periods may be rejected.
- Prices are to be quoted in the unit/packaging specified (e.g. each, 12/box, etc), or may be rejected.
- In the event of extension errors, the unit price bid shall prevail.

10. Taxes

Vendor is responsible for including all applicable taxes in the bid price. LSU is exempt from all Louisiana state and local sales and use taxes. By accepting an award, resident and non-resident firms acknowledge their responsibility for the payment of all taxes duly accessed by the State of Louisiana and its political subdivisions for which they are liable, including but not limited to: franchise taxes, privilege taxes, sales taxes, use taxes, ad valorem taxes, etc.

11. Terms and Conditions

This solicitation contains all terms and conditions with respect to the purchase of the goods and/or services specified herein. Submittal of any contrary terms and conditions may cause your bid to be rejected. By signing and submitting a bid, vendor agrees that contrary terms and conditions which may be included in its bid are nullified; and agrees that this contract shall be construed in accordance with this solicitation and governed by the laws of the State of Louisiana.

12. Vendor Forms/LSU Signature Authority

The terms and conditions of the LSU solicitation and purchase order/contract shall solely govern the purchase agreement, and shall not be amended by any vendor contract, form, etc.

The University's chief procurement officer, or authorized designee, is delegated sole authority to execute/sign any vendor contracts, forms, etc, on behalf of LSU. Departments are expressly prohibited from signing any vendor forms.

Any such vendor contracts/forms bearing unauthorized signatures shall be null and void, shall have no legal force, and shall not be recognized by LSU in any dispute arising therefrom. Vendors who present any such forms to department users for signature without regard to this strict LSU policy may face contract cancellation, suspension, and/or debarment.

13. Awards

Award will be made to the lowest responsible and responsive bidder. LSU reserves the right: (1) to award items separately, grouped, or on an all-or-none basis, as deemed in its best interest; (2) to reject any or all bids and/or items; and (3) to waive any informalities.

All solicitation specifications, terms and conditions shall be made part of any subsequent award as if fully reproduced and included therein, unless specifically amended in the formal contract.

14. Acceptance of Bid

Only the issuance of an official LSU purchase order/contract, a Notification of Award letter, or a Notification of Intent to Award letter shall constitute the University's acceptance of a bid. LSU shall not be responsible in any way to a vendor for goods delivered or services rendered without an official purchase order/contract.

15. Applicable Law

All contracts shall be construed in accordance with and governed by the laws of the State of Louisiana.

16. Awarded Products/Unauthorized Substitutions

Only those awarded brands and numbers stated in the LSU contract are approved for delivery, acceptance, and payment purposes. Any substitutions require prior approval of the LSU Purchasing Office. Unauthorized product substitutions are subject to rejection at time of delivery, post-return at vendor's expense, and non-payment.

17. Testing/Rejected Goods

Vendor warrants that the products furnished will be in full conformity with the specification, drawing or sample, and agrees that this warranty shall survive delivery, acceptance, and use. Any defect in any product may cause its rejection. LSU reserves the right to test products for conformance to specifications both prior to and after any award. Vendor shall bear the cost of testing

STANDARD TERMS & CONDITIONS

INVITATION TO BID

PAGE 4 of 13

SOLICITATION B6AET0064

DUE DATE 10/26/2005

DUE TIME 11:00 am

if product is found to be non-compliant. All rejected goods will be held at vendor's risk and expense, and subject to vendor's prompt disposition. Unless otherwise arranged, rejected goods will be returned to the vendor freight collect.

18. Delivery

Vendor is responsible for making timely delivery in accordance with its quoted delivery terms. Vendor shall promptly notify the LSU Department and/or Purchasing Office of any unforeseen delays beyond its control. In such cases, LSU reserves the right to cancel the order and to make alternative arrangements to meet its needs.

19. Default of Vendor

Failure to deliver within the time specified in the bid/award will constitute a default and may be cause for contract cancellation. Where the University has determined the vendor to be in default, LSU reserves the right to purchase any or all goods or services covered by the contract on the open market and to surcharge the vendor with costs in excess of the contract price. Until such assessed surcharges have been paid, no subsequent bids from the defaulting vendor will be considered for award.

20. Vendor Invoices

Invoices shall reference the LSU purchase/release order number, vendor's packing list/delivery ticket number, shipping/delivery date, etc. Invoices are to be itemized and billed in accordance with the order, show the amount of any prompt payment discount, and submitted on the vendor's own invoice form. Invoices submitted by the vendor's supplier are not acceptable.

21. Delinquent Payment Penalties

Delinquent payment penalties are mandated and governed by Louisiana R.S. 39:1695. Vendor penalties to the contrary shall be null and void, shall have no legal force, and shall not be recognized by LSU in any dispute arising therefrom.

22. Assignment of Contract/Contract Proceeds

Vendor shall not assign, sublet or transfer its contractual responsibilities, or payment proceeds thereof, to another party without the prior written consent and approval of the LSU Purchasing Office. Unauthorized assignments of contract or assignments of contract proceeds shall be null and void, shall have no legal force, and shall not be recognized by LSU in any dispute arising therefrom.

23. Contract Cancellation

LSU has the right to cancel any contract for cause, in accordance with purchasing rules and regulations, including but not limited to: (1) failure to deliver within the time specified in the contract; (2) failure of the product or service to meet specifications, conform to sample quality or to be delivered in good condition; (3) misrepresentation by the vendor; (4) fraud, collusion, conspiracy or other unlawful means of obtaining any contract with the University; (5) conflict of contract provisions with constitutional or statutory provisions of state or federal law; (6) any other breach of contract.

LSU has the right to cancel any contract for convenience at any time by giving thirty (30) days written notice to the vendor. In such cases, the vendor shall be entitled to payment for compliant deliverables in progress.

24. Prohibited Contractual Arrangements

Per Louisiana R.S. 42:1113.A, no public servant, or member of such a public servant's immediate family, or legal entity in which he has a controlling interest shall bid on or enter into any contract, subcontract, or other transaction that is under the supervision or jurisdiction of the agency of such public servant. See statute for complete law, exclusions, and provisions.

25. Equal Employment Opportunity Compliance

By submitting and signing this bid, vendor agrees to abide by the requirements of the following as applicable: Title VI and VII of the Civil Rights Act of 1964, as amended by the Equal Opportunity Act of 1972; federal Executive Order 11246; federal Rehabilitation Act of 1973, as amended; the Vietnam Era Veteran's Readjustment Assistance Act of 1974; Title IX of the Education Amendments of 1972; the Age Act of 1975; the Americans with Disabilities Act of 1990. Vendor agrees not to discriminate in its employment practices, and will render services under any contract entered into as a result of this solicitation without regard to race, color, religion, sex, age, national origin, veteran status, political affiliation, handicap, disability, or other non-merit factor. Any act of discrimination committed by vendor, or failure to comply with these statutory obligations when applicable, shall be grounds for termination of any contract entered into as a result of this solicitation.

26. Mutual Indemnification

Each party hereto agrees to indemnify, defend, and hold the other, its officers, directors, agents and employees harmless from and against any and all losses, liabilities, and claims, including reasonable attorney's fees arising out of or resulting from the willful act, fault, omission, or negligence of the indemnifying party or of its employees, contractors, or agents in performing its obligations under this agreement, provided however, that neither party hereto shall be liable to the other for any consequential damages arising out of its willful act, fault, omission, or negligence.

27. Certification of No Suspension or Debarment

By signing and submitting this bid, bidder certifies that its company, any subcontractors, or principals thereof, are not suspended or debarred under federal or state laws or regulations. A list of parties who have been suspended or debarred by federal agencies is maintained by the General Services Administration and can be viewed on the internet at www.epls.gov.

BOARD OF SUPERVISORS LOUISIANA STATE UNIVERSITY AND AGRICULTURAL & MECHANICAL COLLEGE Purchasing Office, 213 Thomas Boyd Hall Baton Rouge, LA 70803-3001

INSURANCE REQUIREMENTS

WORKMEN'S COMPENSATION AND EMPLOYER'S LIABILITY INSURANCE: The Contractor shall, before commencing any work to be conducted under this contract, procure Workmen's Compensation and Employer's Liability insurance with a limit of liability as required by the Labor Code of the State of Louisiana with an insurance company authorized to write such policies of insurance in the State of Louisiana. It shall be the further responsibility of the Contractor to require that all subcontractors have in full force and effect, a policy of Workmen's Compensation and Employer's Liability insurance before proceeding with any of the work required under this contract. The Employer's Liability limit shall be \$1,000,000 when work is over water and involves maritime exposure.

<u>COMMERCIAL GENERAL LIABILITY INSURANCE</u>: Commercial General Liability Insurance with a combined single limit of \$1,000,000 per occurrence for bodily injury and property damage. This insurance shall include the following coverage:

- 1. Premises Operations;
- 2. Broad Form Contractual Liability:
- 3. Products and Completed Operations;
- Use of Contractors and Subcontractors;
- 5. Personal Injury;
- 6. Broad Form Property Damage;
- 7. Explosion, Collapse and Underground (XCU) Coverage.

<u>BUSINESS AUTOMOBILE LIABILITY INSURANCE</u>: Business Automobile Liability Insurance with a combined single limit of \$1,000,000 per occurrence for bodily injury and property damage, unless otherwise indicated. This insurance shall include for bodily injury and property damage the following coverages:

- 1. Owned automobiles;
- 2. Hired automobiles;
- 3. Non-owned automobiles.

If the vendor/contractor does not own an automobile and an automobile is utilized in the execution of the contract, then only hired and non-owned coverage is acceptable. If an automobile is not utilized for the execution of the contract, then automobile coverage is not required.

Board of Supervisors of Louisiana State University and Agricultural & Mechanical College shall be named as additional insured on all liability policies. A Thirty (30) day prior notice of cancellation must be given to the University for all required coverages. Insurance must be from a company with an A.M. Best's rating of no less than A-:VI who is authorized to do business in the State of Louisiana. The A.M. Best's rating requirement may be waived for Worker's Compensation only.

The successful contractor is to provide the owner with a certificate of insurance prior to commencement of work.

Rev. 02/12/03

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ΕA	E A	ΕA	EA	ΕA	ΕA	UINU
QUOTING# MFD.BY LINE, SUCTION 3/8 INCH VINYL - 500 FEET WITH TWO (2) TUBING COUPLERS. ISCO#68-3700-007 OR EQUAL ****** ADDITIONAL SPECIFICATIONS ATTACHED ***** QUOTING# MFD.BY	STRAINER, 3/8 INCH STANDARD WEIGHTED POLYPROPYLENE ISCO#60-9004-367 OR EQUAL ****** ADDITIONAL SPECIFICATIONS ATTACHED *****	CABLE, CONNECT FOR EXTERNAL 12V DC SOURCE. 6 FT CABLE FOR POWERING PORTABLE SAMPLER OR FLOW METER ISCO#60-1394-023 OR EQUAL ******* ADDITIONAL SPECIFICATIONS ATTACHED *****	MFD.BY MODULE WITH ULTRASONIC LEVEL SENSOR WITH 25 FT CABLE INCLUDING SENSOR MOUNTING BRACKET INSTRUCTION MANUAL, ISCO 710#68-6700-049 OR EQUAL PER ATTACHED SPECIFICATIONS.	QUOTING#MFD.BYMFD.BY	SAMPLER, PORTABLE FULL-SIZE, ISCO 6712 #68-6710-070 OR EQUAL PER ATTACHED SPECIFICATIONS.	DESCRIPTION UNIT PRICE EXTENSION

ITEM	QTY	TINU	DESCRIPTION	UNIT PRICE	EXTENSION
0007	3	ΕA	COUPLER FOR 3/8 INCH VINYL SUCTION LINE; CAN BE USED WITH SAMPLER. ISCO#68-3700-056 OR EQUAL ****** ADDITIONAL SPECIFICATIONS ATTACHED *****		
			QUOTING# MFD.BY		
0008	3	ΕA	CABLE, Y CONNECT FOR SENSOR, RAIN GAUGE AND SAMPLER ISCO#60-9004-342 OR EQUAL ****** ADDITIONAL SPECIFICATIONS ATTACHED *****		
			QUOTING#MFD.BY		
0009	u	EA	MODIFICATION OF ONE BOTTLE FOR FLOW THROUGH CELL ON MULT-PARAMETER PROBE ISCO#60-5314-594 OR EQUAL ******		
			QUOTING#MFD.BY		
0010	H	ΕA	DISPLAY, FIELD MULTI-PARAMETER HANDHELD & SOFTWARE ISCO#CCL0601 OR EQUAL ***** ADDITIONAL SPECIFICATIONS ATTACHED *****		
			QUOTING# MFD.BY		
0011	–	LOT	SERVICE AND ON-SITE TECHNICAL ASSISTANCE ***** ADDITIONAL SPECIFICATIONS ATTACHED *****		
			QUOTING# MFD.BY		
0012	H	EA	DEVICE, RAPID TRANSFER (RTD) TO INCLUDE INSTRUCTION MANUAL, AND POWER/DATA TRANSFER CABLE ISCO 581#68-6700-056 OR EQUAL ***** ADDITIONAL SPECIFICATIONS ATTACHED *****		
			QUOTING#MFD.BY		
0013	-	EA	SYSTEM, BULLHORN SAMPLER NOTIFICATION W/ISCO SPA 665 RELAY ALARM. ISCO#AI-3600 OR EQUAL ***** ADDITIONAL SPECIFICATIONS ATTACHED *****		
			QUOTING# MFD.BY		

TEM	QTY	TINU	DESCRIPTION	UNIT PRICE	EXTENSION
014	ь	ΕA	SOFTWARE, FLOWLINK 4 ISCO#60-2544-054 OR EQUAL		
			QUOTING#MFD.BY		
015	W	EΑ	SONDE, MULTI-PARAMETER LOGGING W/TEMP, CONDUCTIVITY TURBIDITY, RDO (OPTICAL DO), 10 FOOT CABLE, FLOWCELL ISCO#CCL0600 OR EQUAL ***** ADDITIONAL SPECIFICATIONS ATTACHED *****		
			QUOTING#MFD.BY		
		NOTE:	A PREFERENCE, IF APPLICABLE, MAY BE ALLOWED FOR PRODUCTS PRODUCED, MANUFACTURED, ASSEMBLED, GROWN OR HARVESTED IN LOUISIANA. DO YOU CLAIM THIS PREFERENCE? YESNONOTE: PREFERENCES SHALL NOT APPLY TO SERVICE CONTRACTS.	1	
			IS YOUR LOUISIANA BUSINESS WORKFORCE COMPOSED OF A MINIMUM		

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NOTE: COVERAGES PER ATTACHED INSURANCE REQUIREMENTS. THE BOARD OF BE REQUIRED TO FURNISH A CERTIFICATE OF INSURANCE EVIDENCING HIRED, AND/OR NON-OWNED VEHICLES, SUCCESSFULL BIDDER SHALL CONTRACT, INCLUDING DELIVERIES MADE WITH COMPANY OWNED, IF AN AUTOMOBILE IS UTILIZED IN THE EXECUTION OF THE

PRODUCT IS/WAS PRODUCED, MANUFACTURED, ASSEMBLED, GROWN SPECIFY ITEM NUMBER AND LOCATION WITHIN LOUISIANA WHERE

THE

NOTE: THIS PREFERENCE IS NOT APPLICABLE FOR SERVICES.

HARVESTED:

OF FIFTY PERCENT LOUISIANA RESIDENTS?

NOTE: AWARD TO BE MADE ON AN ALL-OR-NONE BASIS

INSURED ON ALL LIABILITY POLICIES.

AND MECHANICAL COLLEGE SHALL BE NAMED AS AN ADDITIONAL SUPERVISORS OF LOUISIANA STATE UNIVERSITY AND AGRICULTURAL

LSU IS A MEMBER OF THE NATIONAL ASSOCIATION OF EDUCATIONAL BUYERS AND THE E & I COOPERATIVE PURCHASING SERVICE

Bid Specifications for ISCO portable samplers and accessories

Item #1 ISCO 6712 portable sampler

There shall be furnished a portable sampler equally suited for sequential and composite sampling applications. The instrument shall be capable of collecting samples from a variety of sources including open channels, sewers and storm water conduits.

The unit shall be capable of either battery or line (AC) power operation.

The unit shall be capable of receiving SDI-12 Communication protocol.

<u>Unit should be equipped with an optional contact closure alarm for contact closure during pumping forward (isco spa part)</u>

The exterior shall be a light colored ABS plastic for superior corrosion resistance and all weather durability.

All electrical components shall be housed in a single controller. There shall be no external electrical or control components. The controller shall use a 4 line, 20 character per line, 80 total character display to show sampler and attached module status and program information.

The control box shall be constructed of 1/4" thick Noryl™ plastic and the enclosure shall conform to NEMA 4X,6 (IP 67 control box, IP 17 pump) standards for water tight, dust tight, and corrosion resistance and submersion.

Samples shall be collected using a peristaltic pump. The pump shall be capable of lifting a sample 28 feet (8 m).

The sampler shall typically deliver sample volumes with an accuracy of (10 ml or (10%, whichever is greater, of the programmed value. The user can select sample volumes from 10 to 990 ml in 1 ml increments.

The sampler controller will include an SDI-12 input interface. The controller will function as a SDI-12 logger. A maximum of 10 input devices can be attached to the sampler controller. Other fully compatible SDI-12 sensors must be programmed for the type of parameter and units selected for measurement.

With the flow module plugged in, the sampler shall be capable of converting level and velocity measurements from the flow module into flow rate, totalizing flow, and displaying level, velocity, flow rate, and total flow in user-selectable units of measure.

Item #2 Bottle Configuration

The sampler shall be supplied with four (4) plastic 1.0 gallon containers w/ lid (part number 68-6700-012).

Item #3 710 module specs: Part number 68-6700-049

There shall be furnished a plug-in flow module to convert the sampler into a combination sampler and flow meter. An ultrasonic probe shall be used to measure level

The sensor shall consist of a single Teflon covered ultrasonic transducer housed in a rugged, watertight, dust-tight, submersible, corrosion resistant (self-certified NEMA 4X, 6 and IP67) Delrin plastic enclosure. The sensor shall include a Teflon covered stainless steel temperature probe to automatically compensate for air temperature changes.

The level measurement span shall be from 0 to 10 feet (0 to 3.05 m). The level shall be measured with a maximum error of \pm 0.02 feet (\pm 0.006 m) over a head change of 1 foot or less (0.31 m or less), and +/-0.03 feet (\pm 0.009 m) over a head change of 1 to 10 feet (0.31 to 3.05 m). The temperature coefficient shall

be \pm 0.000047 per degree F (\pm 0.000085 per degree C) times the distance from the transducer to the liquid surface over the compensated temperature range of 32 to 120 degrees F (0 to 49 degrees C).

The sensor cable shall be 50 feet (15.2 m) long.

The flow module shall be capable of being added to the sampler at any time, and shall be interchangeable in the field. With the flow module plugged in, the sampler shall be capable of converting level measurements from the flow module into flow rate, totalizing flow, and displaying level, flow rate, and total flow in user-selectable units of measure

Item #4 Power Source

The sampler shall require 12 volt DC power for operation. This power shall be supplied external user supplied 12 volt DC power source.

Items #5,6,7 Suction Lines And Strainers

The sampler shall require a suction line and strainer. The suction line shall be made of 3/8 inch (.95 cm) ID vinyl with a length of 500 feet. The unit shall be supplied with a weighted polypropylene strainer with a streamlined polypropylene debris deflector to prevent clogging and 3/8 inch coupler.

Item #8 Connect cable

"Y" connect cable for generic SDI-12 sensor, rain guage to ISCO 6712 sampler. Part number 60-9004-342

Item #9 Bottle Modifiation

One bottle must be modified with flow cell adaptors (part number 60-5314-594)

Item #10 Multi-parameter handheld field Display: (part number ccl0601)

- Control Software must work the Microsoft Pocket PC Operating system. (In-Situ RuggedReader, TDS Recon, Trimble Recon and others)
- Control software must share functionality to Microsoft Windows software so there is no need to learn new software.
- Handheld Controller must be waterproof to IP 67 for protection against dust and accidental submersion.
- Handheld Controller must feature a sunlight-optimized display for easy reading in any condition.
- Handheld Controller must offer both USB or RS-232 output allow versatile connections to a PC.
- Handheld Controller must come with at least 64MB of internal memory and allow for expansion,
 GPS module.
- Handheld Controller must provide Audio feedback providing assurance and accuracy of input.

Item #11 Service and On-site Technical Assistance to include the following:

- Inspection of all equipment shipping to ensure proper items were shipping and that nothing was damaged during shipping. If any item is not included or is damaged then vendor shall complete the process of getting items replaced or shipped immediately.
- Assist in the construction of equipment platforms at all sites.
- Installation and mounting of all equipment on platforms.
- Programming and testing of all equipment.
- Verify equipment operations are consistent with project needs.
- Equipment training for all personnel at the job site.
- Calibration of all equipment.
- On-site technical assistance for one year after installation of equipment.

Training shall be for a minimum of 12 people (3 people per site at 4 sites.)

Item #12 ISCO 581 Rapid Transfer Device

There shall be provided a hand-held device for transferring data from the ISCO Model 6712 sampler.

Data in the form of daily summaries of the sampling data and other external sensing devices accompanying the Model 6712 sampler.

Store reports from up to 25 samplers.

The unit shall be housed in a totally encapsulated polyurethane housing.

The Model 581 shall meet standards for NEMA 4X, 6 (IP 68) standards for water-tightness.

The communications protocol shall use a RS-232 serial communications, transmitting at 9600 baud. The total data storage capability shall be 967 Kbytes.

Item #13 Bull horn WIRELESS TELEMETRY

- The wireless telemetry shall communicate event alarms via cellular phone system.
- The wireless telemetry shall be compatible with above equipment and standard industry sensors; such as ISCO.
- The wireless telemetry shall require 12volts for operation.

 The wireless telemetry shall include antenna, cables and connections required

Item #14 Multi-parameter Sonde Specifications: (part number ccl0600)

The MP TROLL 9000 or equivalent shall be an intelligent probe built to measure and store water level, temperature, barometric pressure and water quality data for profiling applications as well as extended periods of time in extreme environmental conditions. The probe diameter allows the ability to be housed inside a 2" diameter (or larger) monitoring well which protects it from theft, vandalism and temperature fluctuations

The Multi-probe shall be ≤ 3.5 " outside diameter and ≤ 24.0 " in total length when utilizing an Optical DO sensor.

The Multi-probe shall be constructed primarily of 316L (marine grade) Stainless Steel

The Multi-probe must utilize either (2) or (4) standard "D"-cell alkaline batteries, available to users at local stores. Other battery types of the same size must be available to users as an option, including Lithium. The Multi-probe must also have the ability to utilize an external power supply from each of the following sources: SDI-12; AC; DC; solar and other conventional sources.

The Multi-probe must include Barometric Pressure and Temperature sensors as standard probe inclusion. The Multi-probe must incorporate "smart sensors" and "smart sensor ports" to allow for greatest instrument versatility. Smart sensors & ports are defined as those that:

- permit interchangeability and/or replacement by the users in the field (i.e. changing out a
 Dissolved Oxygen sensor with a Nitrate sensor, pH/ORP replaced with Optical
 Dissolved Oxygen etc., as examples);
- retain calibration via on-board micro chips;
- are recognized by sensor type and smart port position by software upon connection via laptop, desktop, or handheld computing device.

Multi-probes with memory (data logging) option must permit storage of a minimum 2MB (>500,000 dp's), but preferably 4MB of internal memory (>1,000,000 data points).

Sensors must be "Smart Sensors" capable of retaining calibration if removed. Default calibrations must also reside within each smart sensor.

All sensors shall be smart sensors and utilize smart ports to facilitate field replacement &/or change.

Sensor specifications:

Optical Dissolved Oxygen (RDO) Sensor - Smart Sensor

- Optical Dissolved Oxygen Sensor must incorporate its own temperature sensor for measurement compensation requirements.
- Optical Dissolved Oxygen sensor must utilize frequency domain / lifetime-based measurement methodology.
- Optical Dissolved Oxygen sensor must NOT require sample flow (movement) or stirring/pulsing requirement for accurate measurements.
- Optical Dissolved Oxygen Sensor must NOT consume oxygen, thus assuring accurate sample
 measurement in any/all water flow conditions and without the use of a "pulsing" technology or
 stirring/circulator device.
- Optical Dissolved Oxygen Sensor must utilize black Teflon® Isolation Coating to protect from sensor from bleaching. Black isolation coating must be scratch & abrasion resistant.
- Optical Dissolved Oxygen Sensor must NOT utilize membranes (as with Clark-cell DO sensors) and should NOT require routine maintenance for up to six months or more.

Conductivity Sensor(s) - Smart Sensor

- Sensors must be available in Low (3 50,000 μS/cm)
- Conductivity sensors must be of a four-electrode design (two drive and two sensing electrodes)
- The Low range Conductivity sensor must utilize carbon electrodes.

Turbidity - Smart Sensor (factory installed)

- Turbidity Sensor shall adhere with ISO method 7027.
- Turbidity sensor range shall be from 0 to a minimum 2000 NTU.
- Turbidity Sensor shall utilize Sapphire lenses, which are more resilient to abrasion & scratches than quartz lenses.

Cables:

- All cable shall be of a Quick-connect type and shall provide Multi-probe users the ability to change lengths and or types (of material) in the field.
- Cable types shall include non-vented Polyurethane and FEP (Teflon equivalent).
- Cables shall permit users the ability to access data from deployed Multi-probes.
- Cable jacketing must be extra thick and abrasion resistant and also include a water block tape that reseals any small holes or cuts (caused by field deployment etc.) in the cable, as well as with a secondary water absorption material.
- Kevlar strength members must be utilized in cable construction.
- A protective cap with a hydrophobic membrane and desiccant must be included at the surface-side of the cable.
- A fully adjustable Kellums Grip must be included on the supplied cable to suspend the Multiprobe/cable.
- Probe must, at user option, be suspendable without cable using a non-vented backshell and steel
 cable.

Software:

- Software must be available for both Microsoft Windows and Microsoft Pocket PC 2003 operating Systems.
- Microsoft Windows-based operating software must be included with system.
- Data shall be able to be viewed in real-time or from .bin file in either a graph or report format.
- The software must allow viewing ALL installed water quality channels simultaneously on the display.
- Raw data must be exportable to Microsoft Excel.
- Software must only download new data unless the user chooses a complete download. Same test data previously downloaded shall be automatically detected and appended to.